

ANCOLD Conference 2011 - The Future of Dams

Draft Technical Program (Version 30 Aug 2011)

DAY 1: TECHNICAL PROGRAM

- 08:00 - 09:00 Registration
- 09:00 - 09:30 Conference Opening
- 09:30 - 10:15 Keynote Address - Prof Chandra Madramootoo
- 10:15 - 10:25 Keynote Address - Questions
- 10:25 - 11:00 Morning break

Session 1A Balancing Nature, Society and Climate		Session 1B Dams Investigations, Analysis & Design	
11:00 - 11:20	64 Mokoan - Return to Wetland Project Mr David Jeffery (Goulburn-Murray Water)	99 Innovation for Post-tensioning Concrete Gravity Dams – Bridging the Wellington Dam Spillway Mr Paul Southcott (Entura), Mr Ben Johnston (Leighton Contractors), Mr Paul Hurst (Water Corp), Mr Michael Kakulas (AECOM), Mr Gerry Hofmann (Leighton Contractors)	
11:20 - 11:40	18 Cotter Dam Enlargement – using risk analysis, power analysis and adaptive management to minimise impacts on key aquatic species Dr Ian Campbell (GHD)	83 The Recent Developments and Applications of Large Re-stressable Ground Anchors for Dams Mr Mark Sinclair (Structural Systems), Mr Richard Rodd (Richard Rodd & Ass)	
11:40 - 12:00	69 Modelling Studies to Design and Assess Decommissioning Actions for a Seismically Unsafe, Concrete Arch Dam Mr Krey Price (Tetra Tech Aus), M Harvey & R Mussetter (Tetra Tech USA)	12 Finite Element Transient Thermal Analysis of the Enlarged Cotter Dam Mr Craig Messer, Mr Francisco Lopez, Mr Manoj Laxman (GHD)	
12:00 - 12:20	31 Burrum Weir Fishway – Fish Biology and River Flows: Two Faces Ms Lesa Delaere & Mr N Clark (GHD), M Vanner (Wide Bay Water Corp), I Stewart (Kingfisher Research)	21 Enlarged Cotter Dam Saddle Dams - Materials and Construction Dr Mark Locke (GHD)	

12:20 - 13:30 Lunch

Session 2A Dams Rehabilitation and Modification using Risk Assessment & ALARP		Session 2B Tailings Dams Design, Construction and Management	
13:30 - 13:50	47 How Do You Solve a Problem Like Retarding Basins? An Asset Owners Perspective Ms Kirsty Carroll (Melbourne Water)	33 Tailings Storage, Current and Future Trends Dr Bruce Brown (Rio Tinto), M Coghill	
13:50 - 14:10	49 How SunWater, as a commercial dam owner makes investment decisions for dam safety upgrades Mr Robert Keogh & M Halwala & P Boettcher & R Butterfield (SunWater)	41 The Challenges of Building Tailings Dams in Seismic Regions Mr Richard Davidson (URS), J Pilz, N Moregenstern	
14:10 - 14:30	55 Experiences form the use of risk management and ALARP Dr Andy Hughes (UK)	80 Design, Construction and Operation of a Partially Lined, Ash Storage Facility Constructed from Mine Waste W Ludlow & P Keefer (Golder Ass), T Mortimer & J McNicol (CS Energy Aus)	
14:30 - 14:50	13 Comparing Tolerable Risk Guidelines for Dams and Levees in the United States and the Netherlands N Shorteland, A Roos & W Empson	78 & 79 Goro Nickel Mine: Three metres foundation settlement under a 70 m high earth dam A Barrett & G Fergus & P Stocker & M Gowan (Golder Ass)	

14:50 - 15:20 Afternoon Break

Session 3A Dams Investigations, Analysis & Design		Session 3B Lessons from Industry Professionals
15:20 - 15:40	67 & 68 Hume Dam Spillway Southern Junction Filter Drainage Works Mr Rod Westmore (SMEC), A George (NSW State Water)	93 Stream Gauging Mr Bob Wark (GHD)
15:40 - 16:00	17 Searching for ASR - Some Recent Anomalous Findings Ms Louise Thomas & Mr Bob Wark & J Au (GHD)	94 Mechanical and Electrical Aspects of Spillways and Outlet Works Mr Stuart Richardson (Goulburn-Murray Water)
16:00 - 16:20	53 Toorourrong Reservoir - Small Dam, Big Problems Mr Craig Johnson (SKM), Mr Mark Arnold (Melbourne Water)	95 Anchors in Dams Mr Richard Rodd (Richard Rodd & Assoc)
16:20 - 16:40	84 Reliability of Simplified Methods for Evaluation of Earthquake-Induced Displacement in Earth and Rock Fill Dams Mojtaba Esfahani Kan (UNSW), H Taiebat	96 Hydrology for Dams Dr Rory Nathan & Mr Peter Hill (SKM)
16:40 - 17:00	42 Where is our Weir going - an Unusual Upgrade! Mr Malcolm Barker & Ms Amanda Amendt (GHD)	97 Filters in Dam Design Dr Mark Foster (URS)
17:00 - 17:05	End of day announcements	

DAY 2: TECHNICAL PROGRAM

- 08:00 - 08:55 Registration
08:55 - 09:00 Welcome to Day 2 and Housekeeping
09:00 - 09:45 Keynote Speaker - Robin Charlwood
09:45 - 09:55 Keynote Speaker - Questions
09:55 - 10:15 Invited Speaker - Tony Morse
10:15 - 10:20 Invited Speaker - Questions
10:20 - 10:50 Morning break

Session 4A Dams Rehabilitation and Modification using Risk Assessment & ALARP		Session 4B Design and Rehabilitation of Appurtenant Works
10:50 - 11:10	66 Towards increased clarity in the application of ALARP Dr Roger Vreugdenhil (MWH), Mr Peter Hill (SKM), Mr Siraj Perera & Ms Sue Ryan (DSE)	5 Refurbishment of Ambuklao and Binga Hydro Power Dams and Appurtenant Works Mr John Grimston (Tonkin & Taylor), R Dawson
11:10 - 11:30	New developments in seismic hazard analysis for dams in Australia Paul Sommerville (URS)	23 Horror Stories with Outlet Works Mr Peter Hurst & Mr Michael Somerford (WA Water Corp), Mr Bob Wark & Ms Sofia Vargas-Pedroza & Mr Andy White (GHD)
11:30 - 11:50	Perspectives of the recent Japan earthquake and tsunami Professor Nori Matsumoto	8 Safer Access => Safer Inspections + Safer Operations => Safer Dams Mr Graeme Mann & Mr Peter Hulcup (GHD), Mr A Gower & Mr J Mills (WA Water Corp)
11:50 - 12:10	91 WA dam safety challenges for ANCOLD - Developments since the 2007 Workshop Paper Mr Michael Somerford (WA Water Corp)	51 A Novel Braking System for the Warragamba Dam Gates Mr James Lawley (Geotech), R Keays, Richard Joel (MWH)
12:10 - 13:10	Lunch	

	Session 5A Dams Safety & Emergency Management	Session 5B Spillways Investigations, Analysis & Design
13:10 - 13:30	16 The Quality Chain of Dam Surveillance Mr Dan Forster (Hydro Tas), Mr Murray Gillion (DamWatch)	72 Achieving Consistency in Derivation of the Probable Maximum Flood Dr Rory Nathan & Mr Peter Hill (SKM), E Weinmann (Monash Uni)
13:30 - 13:50	25 Benchmarking Methods for Estimating Loss of Life in Australian Dam Safety Risk Analyses Mr Simon Lang & Mr Peter Hill & K Sih & C Meneses (SKM)	29 Assessment of Hydrologic Risk for Hume Dam Dr Nanda Nandakumar (State Water NSW), Dr Rory Nathan (SKM), (MDBA)
13:50 - 14:10	4 Does Length Matter? A Discussion of the 2nd Dimension in Dam Break Modelling Mr Mark Britton (DHI Water & Environment)	60 Awoonga Dam Acceptable Flood Capacity design - the anguish of erosion risk and implications for design Mr Malcolm Barker & Mr Toby Loxton (GHD), R West (Gladstone Area Water Board)
14:10 - 14:15		Attendees move to venue for Session 5A
14:15 - 15:00	Lessons from Recent Brisbane Floods: 24 January 2011 Brisbane River Floods and Examination by Media of the Dam Operations Mr Michel Raymond (URS) Hydrological Learnings from the Recent Brisbane Floods Dr Rory Nathan (SKM)	
15:00 - 15:20	Afternoon Break	
15:20 - 15:50	ANCOLD Guidelines Update Environmental Management of Dams Stuart MacNish Consequence Categories for Dams David Ryan Tailings Dams Design, Construction and Operation David Brett	
15:50 - 16:20	Conference Close, Awards and Presentations	
16:30 - 17:30	ANCOLD AGM	
After AGM	End of Conference Happy Hour	